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# SHIPPING FEVER OF CATTLE



# **PASTEURELLOSIS**



by

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## SHIPPING FEVER OF CATTLE

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## **PASTEURELLOSIS**

Shipping Fever or Pasteurellosis is one of the more serious cattle diseases in Alberta, occurring mainly in the fall and early winter months coincident with the movement of feeder cattle. While more commonly seen in recently shipped animals, it may develop at any time in any cattle. Formerly called Hemorrhagic Septicemia, Pasteurellosis is now the name more often used.

The exact cause of the disease is not known. Pasteurella organisms are the main bacteria involved although viruses probably are important causative agents. Parainfluenza virus may produce the initial damage with bacteria such as Pasteurella playing a secondary role. A large percentage of our cattle population shows evidence of the virus in the blood, but this does not necessarily mean that the animals have had shipping fever.

Weaning, handling, overcrowding, improper feeding and watering and other stresses are predisposing causes of shipping fever. Shipping alone is not essential to the production of the disease, but stress factors are probably more important than viruses or bacteria in precipitating outbreaks.

#### **ENVIRONMENTAL STRESSES**

It is important to bear in mind the following predisposing factors or stresses in relation to shipping fever:

- 1. Prolonged and exhausting shipment by truck or train without periodic unloading for feed and water.
- 2. Overcrowding during shipment.
- 3. Exposure to cold and wet weather without adequate shelter.
- 4. Dehorning, castrating and vaccinating of newly-weaned calves just off summer range.
- 5. Lack of familiarity with feeding and watering facilities upon arrival at the feedlot.

#### SIGNS OF DISEASE

Most outbreaks of shipping fever occur within a week after arrival at the new premises. Early signs of the disease are loss of appetite, rough hair coat, dry muzzle, slight cough, and lying or standing alone. Temperature at this time may reach 105 to 107°F. A discharge from the nostrils, at first clear, then creamy, and encrusted muzzle, may occur. The eyes may water, rumen function may cease and diarrhea may be present, although these signs can appear in other diseases and are not especially characteristic of Pasteurellosis. Breathing will become increasingly rapid and distressed if the disease progresses untreated. In severe cases pneumonia develops and death may follow in two or three days. The disease may become chronic and the animal may linger on for several weeks. Some chronic cases may survive but remain unthrifty as a result of damage to the lungs.

#### **DIAGNOSIS**

A veterinarian should be called early to make an accurate diagnosis, as a wrong one could be serious and expensive. It is often difficult to diagnose shipping fever due to its similarity to certain other diseases in cattle and it must be differentiated from Infectious Bovine Rhinotracheitis (I.B.R.), mucosal disease and common bacterial pneumonia, to name but a few. In some cases I.B.R. or mucosal disease may be present at the same time as shipping fever to further complicate diagnosis.

#### TREATMENT

Successful treatment depends on prompt implementation of correct measures following an early, accurate diagnosis.

Sulfonamides and antibiotics are generally useful in treating early cases. Sick animals should be isolated in warm, dry, well ventilated pens separate from healthy ones and should not be overly stimulated or exited during treatment. Advanced cases may not respond because of extensive lung damage.

#### **CONTROL AND PREVENTION**

Prevention of the disease must be based on sound management practices. Care in the handling and feeding of recently shipped or purchased animals will decrease the danger of shipping fever. New additions should be quarantined for at least two weeks. Avoidance of the environmental stresses mentioned earlier will also reduce the risk. Bacterins or other biological products

are sometimes employed but are not particularly effective. If a bacterin is used, it should be administered at least two weeks prior to shipping to be of any value. Long-acting antibiotics may help if given at the time of shipping but their value is difficult to assess. The newer live virus vaccines may be quite beneficial, although no vaccine can counteract all the stresses and insults to which shipped cattle are subjected.

#### **PRECONDITIONING**

Preconditioning or prestressing of calves is a technique of management adopted by some cattlemen in recent years. It means that the calf is weaned well before sale, castrated, dehorned, started on grain, treated for parasites and vaccinated against blackleg, malignant edema and other diseases, on the advice of the veterinary practitioner. These calves should then have many common stress factors behind them and stand a better chance in the feedlot. The preconditioning of calves should prove beneficial; however, the extra cost must be justified by reduced disease and faster gains for the feedlot operator.

It must be emphasized that there is no substitute for good management.

#### DISINFECTION OF PREMISES

Shipping Fever is an infectious disease and efforts must be made to disinfect contaminated premises. Corrals and lots should be thoroughly cleaned when empty, the manure properly disposed of, and disinfectants such as creosol solutions used on fences, sheds, troughs and other solid surfaces. Sunshine is the best disinfectant for the land but it is only effective when the land is clean.

### SHIPPING FEVER

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#### SIGNS OF TROUBLE -

- 1. Cattle become listless and go off feed.
- 2. Coughing, nasal discharge, standing alone.
- 3. Rapid, labored breathing indicates onset of pneumonia.

#### WHAT TO DO -

- 1. Inject bacterin or vaccine two or three weeks before danger period.
- 2. Prevent fatigue, exposure of shipped-in cattle.
- 3. Quarantine new arrivals.
- 4. Call veterinarian at first sign of trouble.

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# PROMPT DIAGNOSIS AND TREATMENT ARE ESSENTIAL

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